

REMARKS

Claims 1-6, 8-14 and 16-19 are pending in this application. Claims 1, 5 and 11 have been amended. No new matter has been introduced.

Claims 1, 5 and 11 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Grafton et al. (U.S. Patent No. 5,964,783) (“Grafton ‘783”) in view of Jenkins, Jr. (U.S. Patent No. 5,571,139) (“Jenkins”). This rejection is respectfully traversed.

Grafton ‘783 and Jenkins, considered alone or in combination, do not disclose or suggest all limitations of claims 1, 5 and 11. Grafton ‘783 does not teach or suggest “a suture eyelet . . . disposed completely within the anchor body,” or a “suture loop disposed completely within the drive socket,” as claims 1, 5 and 11 recite. Loop 11 of Grafton ‘783 (which would arguably correspond to the “suture eyelet” or “suture loop” of the claimed invention) is located outside the hexagonal drive head 10 and outside the body 4, and not “completely within the anchor body,” as in the claimed invention.

Jenkins is also silent about “a suture eyelet formed of a strand of suture,” or about a “suture loop disposed completely within the drive socket,” much less about “a suture eyelet formed of a strand of suture insert-molded into the bioabsorbable anchor body,” as in the claimed invention. Jenkins teaches two suture knots 27, 28 formed by four suture strands 29, 30 disposed within body 13 of bidirectional suture anchor 1, and not a “suture eyelet” or a “suture loop” formed “of a strand of suture” (i.e., by a single suture), much less a “suture eyelet” formed by a single strand which is insert-molded into the anchor, as in the claimed invention.

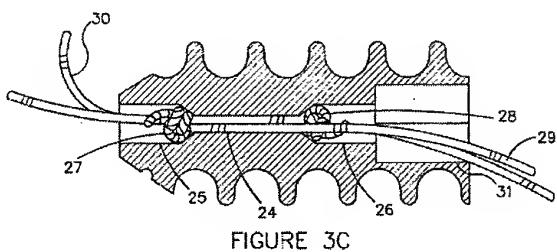
Knot 28 of Jenkins is not a “suture eyelet.” As known to those skilled in the art and as defined in the American Heritage Dictionary (2d Ed.), an “eyelet” has a different meaning from that of a “knot.” Specifically, the term “eyelet” is defined as a “small eye” or a “small hole or perforation . . . used for fastening with a cord or hook,” whereas the term “knot” is defined as a “compact intersection of interlaced material.” Thus, the compact intersection that forms a knot

cannot be a “small hole or perforation” much less a “small hole or perforation . . . used for fastening with a cord or hook.”

Applicants also submit that, even considering *arguendo* that the suture knot of Jenkins would be an “eyelet,” Jenkins still fails to teach or suggest a “second suture threaded through the suture eyelet and passing slidingly through the eyelet, for tying tissue to bone,” as in the claimed invention (emph. added). No suture is threaded through the knot of Jenkins, or through any structure of Jenkins. No suture passes slidingly through the knot of Jenkins, or through any structure of Jenkins. If anything, the only suture that is “threaded through” or “pass[ed] slidingly through” the knot of Jenkins (under the Examiner’s interpretation) is the suture of the knot itself.

Applicants also submit that Jenkins teaches against “a strand of suture insert-molded into the bioabsorbable anchor body,” as claim 1 recites. Jenkins specifically teaches that, because of the bidirectional configuration of its suture anchor, the “[s]uture threads, such as second suture thread 30, are drawn through each anchor 1 and its respective pilot hole, and the suture is tied off to create second suture thread knot 28 within the proximal portion 26 of each anchor 1” (col. 5, ll. 39-42). Thus, drawing suture through the suture anchor of Jenkins and tying off such suture (that is first drawn through the anchor) would not be possible with an insert-molded strand.

In the Office Action dated July 17, 2009, the examiner asserts that “Jenkins teaches the first insert-molded suture having an intertwined shape (Fig. 3C)” (Office Action at 8). Applicants disagree. As shown in Fig. 3C of Jenkins (reproduced below), suture threads 29 and 30 of Jenkins are not “intertwined,” but rather they are “knotted” to each other (not to themselves) to form knots 27, 28.



Applicants also submit that a person of ordinary skill in the art would also not have been motivated to combine the teachings of Grafton '783 with those of Jenkins. First, Grafton '783 specifically teaches against countersunking (see Grafton '783 at col. 2, ll. 19-21: "a need exists for suture anchors having eyelets that will not abrade tissue and do not require countersunking"). In contrast, the bidirectional suture anchor of Jenkins includes both proximal and distal recesses below the drive socket (col. 2, ll. 47-52). Second Grafton '783 teaches a non-flexible, insert-molded suture 8 that is provided during the fabrication of a unidirectional anchor. In contrast, Jenkins teaches four flexible suture strands 29, 30 that are tied together to form two knots within a bidirectional anchor.

Thus, one skilled in the art would not have been motivated to combine Grafton '783 (which specifically teaches against countersunking) with Jenkins (which specifically teaches countersunking). One skilled in the art would also not have been motivated to combine Grafton '783 (which specifically teaches a non-flexible, insert-molded suture provided during the fabrication of the anchor) with Jenkins (which specifically teaches the insertion of the flexible suture strands within the anchor and then the tying of such strands to form two knots). A person skilled in the art would also not have been motivated to combine the bidirectional anchor of Jenkins with the unidirectional anchor of Grafton '783, since the suture loop 11 of Grafton '783 (which extends outside the body anchor) would not be suitable for direct insertion into a hole (i.e., would not be suitable for bidirectional use).

For at least these reasons, the Office Action fails to establish a *prima facie* case of obviousness and withdrawal of the rejection of claims 1, 5 and 11 is respectfully requested.

Claims 1-3, 8, 9, 11, 12, 16, 17 and 19 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Jenkins, Jr. (U.S. Patent No. 5,571,139) ("Jenkins") in view of Grafton et al. (U.S. Patent No. 5,964,783) ("Grafton '783"). This rejection is respectfully traversed.

The subject matter of claims 1-3, 8, 9, 11, 12, 16, 17 and 19 would not have been obvious over Jenkins and Grafton '783, considered alone or in combination. As noted above,

Grafton ‘783 and Jenkins (alone or in combination) fail to disclose or suggest all limitations of amended independent claims 1, 5 and 11. One skilled in the art would also not have been motivated to combine the teachings of Grafton ‘783 with those of Jenkins. For these reasons, withdrawal of the rejection of claims 1-3, 8, 9, 11, 12, 16, 17 and 19 is also respectfully requested.

Claims 10, 14 and 18 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Jenkins and Grafton ‘783, and further in view of Grafton et al. (U.S. Patent No. 6,319,270) (“Grafton ‘270”). This rejection is respectfully traversed.

The subject matter of claims 10, 14 and 18 would not have been obvious over Jenkins, Grafton ‘783 and Grafton ‘270, considered alone or in combination. None of the cited references, alone or in combination, discloses or suggests all limitations of amended independent claims 1 and 11. As noted above, Jenkins and Grafton ‘783 do not disclose all limitations of claims 1 and 11. Grafton ‘270 teaches a headed bioabsorbable tissue anchor with a flat head for engaging tissue and continuous thread spiraling around a tapering central core. Grafton ‘270 does not even teach a suture eyelet or loop, much less a suture eyelet or suture loop having the characteristics recited in claims 1 and 11. For these reasons, withdrawal of the rejection of claims 10, 14 and 18 is respectfully requested.

Claims 4 and 13 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Jenkins and Grafton ‘783, in view of Jackson (U.S. Patent No. 6,454,772). This rejection is respectfully traversed.

Jenkins, Grafton ‘783 and Jackson (alone or in combination) do not disclose or suggest all limitations of amended independent claims 1 and 11 and of dependent claims 4 and 13. As noted, Jenkins and Grafton ‘783 do not disclose all limitations of the claimed invention. Jackson fails to rectify the deficiencies of Jenkins and Grafton ‘783. Jackson teaches a “set screw for locking a first implant in position relative to a second implant,” the set screw being inserted by rotating the screw 1 into rod 61 (col. 8, ll. 65-67; col. 9, ll. 1-3), and not an anchor which is

provided with a suture loop disposed within the anchor and which is driven by employing a driver. Withdrawal of the rejection of claims 4 and 13 is also respectfully requested.

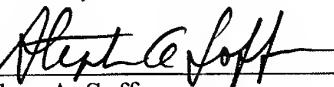
Claims 5 and 6 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Dreyfuss (U.S. Patent No. 6,652,563) in view of Grafton '783. This rejection is respectfully traversed.

Dreyfuss and Grafton '783, alone or in combination, do not disclose or suggest all limitations of claims 5 and 6. Dreyfuss teaches a threaded suture anchor with a body formed of metals such as titanium alloy, and not with a "bioabsorbable anchor body," as claim 5 recites. In addition, suture loop 122 and knots 125 are not "insert-molded" into the anchor, much less "insert-molded into the bioabsorbable anchor body" and having an "intertwined shape," as in the claimed invention. Grafton '783 fails to rectify the deficiencies of Dreyfuss. Grafton '783 does not disclose or suggest "a suture loop . . . disposed completely within the anchor body." Loop 11 of Grafton '783 (which would arguably correspond to the "suture loop" of the claimed invention) is located outside the hexagonal drive head 10 and outside the body 4, and not "completely within the anchor body," as in the claimed invention. For these reasons, withdrawal of the rejection of claims 5 and 6 is also respectfully requested.

Allowance of all pending claims is solicited.

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Respectfully submitted,

By 
Stephen A. Soffen
Registration No.: 31,063
Gabriela I. Coman
Registration No.: 50,515
DICKSTEIN SHAPIRO LLP
1825 Eye Street, NW
Washington, DC 20006-5403
(202) 420-2200
Attorneys for Applicants